

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IB2004/000871

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 H04R3/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 H04R H04H H03G H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/130834 A1 (MADARASZ RICHARD L ET AL) 19 September 2002 (2002-09-19) paragraph '0037! - paragraph '0044! paragraph '0049! - paragraph '0050! paragraph '0057!; figure 1 -----	1-12
X	WO 91/03891 A (MOTOROLA INC) 21 March 1991 (1991-03-21) claim 4; figures 1,3 -----	1,7,11,12
A	DE 200 11 778 U (LUCENTE RAINER) 13 June 2001 (2001-06-13) page 1, line 25 - page 2, line 10 -----	3
A	US 5 778 077 A (DAVIDSON DENNIS M) 7 July 1998 (1998-07-07) abstract -----	4
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
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- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

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- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the international search

30 July 2004

Date of mailing of the international search report

09/08/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2003/038849 A1 (CRAVEN JEFFREY ALAN ET AL) 27 February 2003 (2003-02-27) -----	

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Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 2002130834	A1	19-09-2002	WO	02075691 A2	26-09-2002
WO 9103891	A	21-03-1991	WO	9103891 A1	21-03-1991
DE 20011778	U	13-06-2001	DE	20011778 U1	13-06-2001
US 5778077	A	07-07-1998	NONE		
US 2003038849	A1	27-02-2003	NONE		